What Is Claimed Is:

1. A device for controlling a generator including a diode bridge, comprising:

a transistor for at least temporarily short-circuiting the diode bridge, the transistor including an interrupter connected parallel to the diode bridge,

wherein the transistor has a base which receives a control signal.

2. The device according to claim 1, wherein the transistor includes one of a MOS field-effect transistor, an insulated gate bipolar transistor and a further semiconductor switching device.

3. The device according to claim 1, wherein the control signal is a modulatable signal, the modulatable signal having a frequency which is adjustable for setting a voltage at an output of the diode bridge that is substantially higher than a predetermined generator output voltage.

4. The device according to claim 3, wherein the modulatable signal includes one of a pulse-width modulated signal and a further signal having a variable mark-to-space ratio.

5. The device according to claim 4, wherein the mark-to-space ratio of the modulatable signal is determined by generating phase voltages from the generator corresponding to higher predetermined voltages at the output of the diode bridge.

6. The device according to claim 1, further comprising:

a diode element coupled between the diode bridge and a voltage detection point, the diode element allowing a flow of a current only from the generator to the voltage detection point.

7. The device according to claim 6, further comprising:

a capacitor smoothing the current detected at the voltage detection point.

8. The device according to claim 1, wherein the diode bridge includes a resonant controller providing a step-up converter function using predetermined switching principles.

9. The device according to claim 1, wherein the generator is a three-phase generator including three stator inductors.

10. The device according to claim 9, wherein the generator rectifies a current induced in the stator inductors by synchronously generated voltages.

11. A device for controlling a generator including a controlled transistor bridge having one of a freewheeling diode and a first transistor, comprising:

a second transistor for at least temporarily short-circuiting the controlled transistor bridge, the second transistor including an interrupter connected parallel to the controlled transistor bridge,

wherein the second transistor has a base which receives a control signal, and

wherein the controlled transistor bridge provides a step-up converter function.

12. The device according to claim 11, wherein the controlled transistor bridge and the first transistor are controlled to obtain a synchronous rectification.

13. A method for controlling a generator having a diode bridge, comprising the steps of:

at least temporarily short-circuiting the diode bridge using a transistor, the transistor including an interrupter coupled parallel to the diode bridge; and

providing a control signal to a base of the transistor for controlling the generator.

14. The method according to claim 13, wherein the transistor includes one of a MOS field-effect transistor, an insulated gate bipolar transistor and a further semiconductor switching device.

15. The method according to claim 13, wherein the control signal is a modulatable signal, the modulatable signal having a frequency which is adjustable for setting a voltage at an output of the diode bridge that is substantially higher than a predetermined generator output voltage.

16. The method according to claim 15, wherein the modulatable signal includes one of a pulse-width modulated signal and a further signal having a variable mark-to-space ratio.

17. The method according to claim 16, further comprising the step of:

determining the variable mark-to-space ratio to generate phase voltages from the generator corresponding to higher predetermined voltages at the output of the diode bridge.

18. The method according to claim 13, further comprising the step of:

coupling a diode element between the diode bridge and a voltage detection point, the diode element providing a flow of a current only from the generator to the voltage detection point.

19. The method according to claim 18, further comprising the step of:

smoothing the current detected at the voltage detection point using a capacitor.

20. The method according to claim 13, further comprising the step of:

implementing a step-up converter function using predetermined switching principles and a resonance converter.

21. The method according to claim 13, wherein the generator is a three-phase generator including three stator inductors.

22. The method according to claim 21, wherein the generator rectifies a current induced in the stator inductors by synchronously generated voltages.

23. A method for controlling a generator having a controlled transistor bridge, the controlled transistor bridge including one of a freewheeling diode and a first transistor, the method comprising the steps of:

at least temporarily short-circuiting the controlled transistor bridge using a second transistor, the second transistor including an interrupter coupled parallel to the controlled transistor bridge;

providing a control signal to a base of the second transistor for controlling the generator; and

providing a step-up converter function using the controlled transistor bridge.

24. The method according to claim 23, further comprising the step of:

controlling the transistor bridge and the first transistor to obtain a synchronous rectification.

25. A device for controlling a generator including a rectifier bridge, comprising:

a transistor for at least temporarily short-circuiting the rectifier bridge, the transistor including an interrupter connected parallel to the rectifier bridge,

wherein the transistor has a base which receives a control signal,

wherein the rectifier bridge includes three diodes and three controllable transistors, and

wherein the three controllable transistors are controlled to enable the rectifier bridge to perform a step-up converter function.

26. A method for controlling a generator having a rectifier bridge, comprising the steps of:

at least temporarily short-circuiting the rectifier bridge using a transistor, the transistor including an interrupter coupled parallel to the rectifier bridge, the rectifier bridge including three diodes and three controllable transistors;

providing a control signal to a base of the transistor for controlling the generator; and

controlling the three controllable transistors to enable the rectifier bridge to perform a step-up converter function.

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